

## Ford Escape Advanced Research Fleet

Number of vehicles: 21

Date range of data received: 11/01/2009 to 08/31/2011

Reporting period: Nov 09 - Aug 11

Number of vehicle days driven: 6,434

### All Trips Combined

Overall gasoline fuel economy (mpg)	38
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	100
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	66
Total number of trips	28,551
Total distance traveled (mi)	359,129

### Trips in Charge Depleting (CD) mode<sup>3</sup>

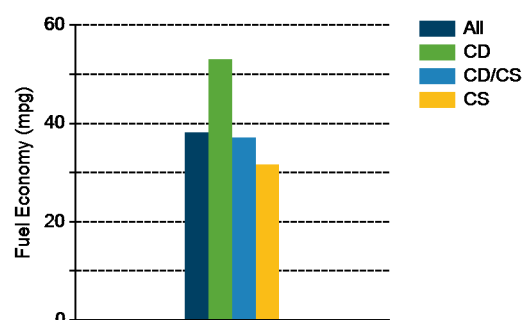
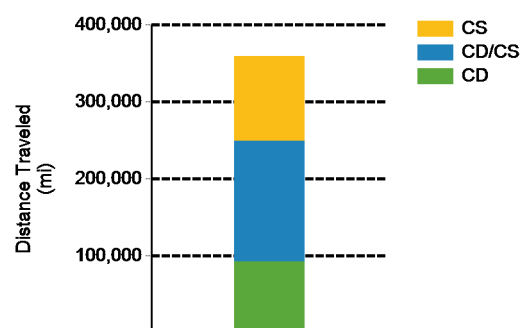
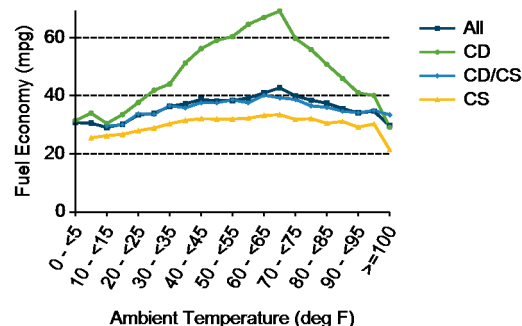
Gasoline fuel economy (mpg)	53
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	168
Number of trips	16,192
Percent of trips city   highway	84%   16%
Distance traveled (mi)	93,149
Percent of total distance traveled	26%

### Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

Gasoline fuel economy (mpg)	37
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	54
Number of trips	5,444
Percent of trips city   highway	37%   63%
Distance traveled (mi)	156,540
Percent of total distance traveled	44%

### Trips in Charge Sustaining (CS) mode<sup>7</sup>

Gasoline fuel economy (mpg)	32
Number of trips	6,907
Percent of trips city   highway	65%   35%
Distance traveled (mi)	109,440
Percent of total distance traveled	30%

**Gasoline Fuel Economy By Trip Type**

**Distance Traveled By Trip Type**

**Fuel Economy By Ambient Temperature**


Notes: 1 - 7. Please see <http://avt.inl.gov/pdf/phev/fordreportnotes.pdf> for an explanation of all PHEV Fleet Testing Report notes.

Since these vehicles are flex-fuel capable, some driving events are conducted with E-85, which may decrease fuel economy results

"The Ford Escape Advanced Research Fleet was designed as a demonstration of customer duty cycles related to plug-in electric vehicles. The vehicles used in this demonstration have not been optimized to provide the maximum potential fuel economy."

## Trips in Charge Depleting (CD) mode

	City	Highway
Gasoline fuel economy (mpg)	49	58
DC electrical energy consumption (DC Wh/mi)	168	167
Percent of miles with internal combustion engine off	38%	12%
Average trip driving intensity (Wh/mi)	266	305
Average trip distance (mi)	4	17

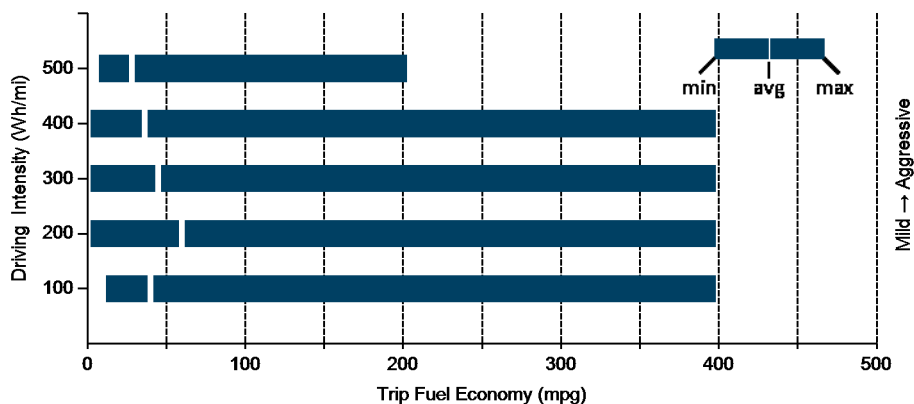
## Trips in Charge Depleting and Charge Sustaining (CD/CS) mode

Gasoline fuel economy (mpg)	43	36
DC electrical energy consumption (DC Wh/mi)	75	51
Percent of miles with internal combustion engine off	30%	5%
Average trip driving intensity (Wh/mi)	278	325
Average trip distance (mi)	9	40

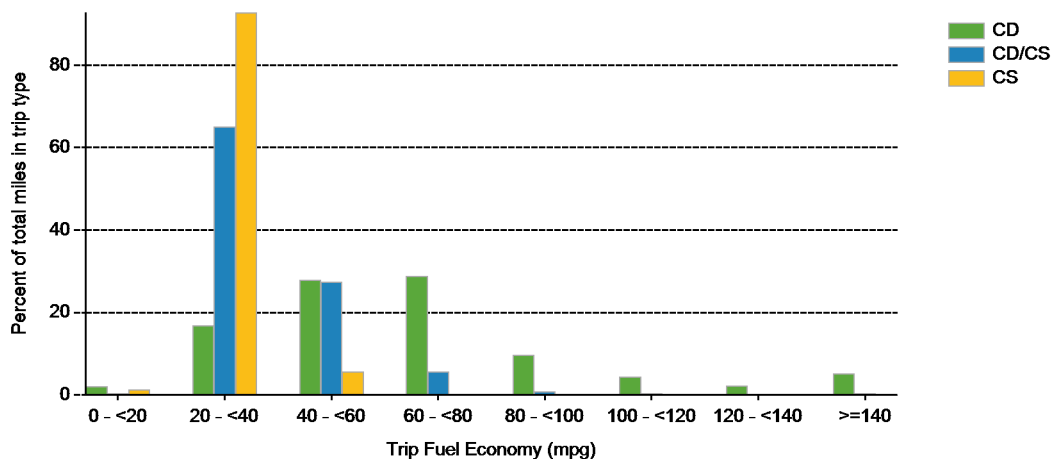
## Trips in Charge Sustaining (CS) mode

Gasoline fuel economy (mpg)	30	32
Percent of miles with internal combustion engine off	23%	4%
Average trip driving intensity (Wh/mi)	266	321
Average trip distance (mi)	4	38

Effect Of Driving Intensity (Wheel Energy) on Fuel Economy This Month



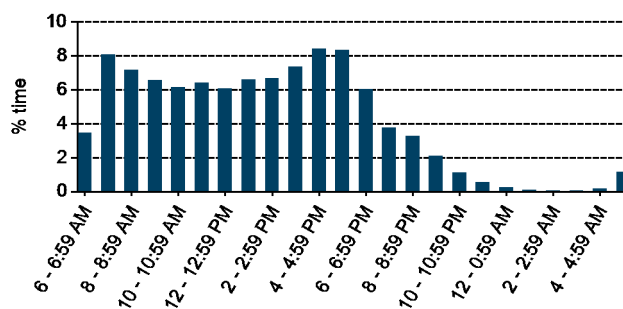
Trip Fuel Economy Distribution By Trip Type



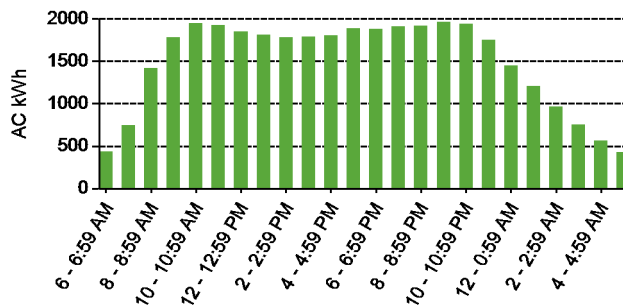
## Plug-in charging

Average number of charging events per vehicle per month when driven	45
Average number of charging events per vehicle per day when driven	3.0
Average distance driven between charging events (mi)	18.3
Average number of trips between charging events	1.5
Average time plugged in per charging event (hr)	6.1
Average time charging per charging event (hr)	1.3
Average energy per charging event (AC kWh)	1.8
Average charging energy per vehicle per month (AC kWh)	81.7
Total number of charging events	19,611
Total charging energy (AC kWh)	35,884

**Time of Day When Driving**



**Time of Day When Charging**



**Time of Day When Plugging In**

